

L 04550-67

ACC NR: AP6025991

using alkoxymethyl ether of acetylenecyclohexanol and trialkoxysilane with Speier catalyst. A summary table shows the boiling point, refractive index, density, molar refraction and elemental analysis for the above compounds. The five acetylenic organosilicon cyclohexyl formals have been synthesized and characterized for the first time. Orig. art. has: 1 table.

SUB CODE: 07/

SUBM DATE: 27Apr65/

ORIG REF: 001/

OTH REF: 001

Card 3/3 *plus*

L 04551-67 EWT(m)/EWP(j) RM
ACC NR: AP6025992

SOURCE CODE: UR/0079/66/036/007/1295/1297

AUTHOR: Shikhiyev, I. A.; Aslanov, I. A.; Mekhmandarova, N. T.

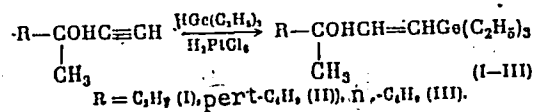
ORG: none

TITLE: Investigations of synthesis and transformations of unsaturated organogermanium compounds. XXX. Synthesis and transformations of certain branched monoatomic tertiary ethylenic organogermanium alcohols

SOURCE: Zhurnal obshchey khimii, v. 36, no. 7, 1966, 1295-1297

TOPIC TAGS: organic synthesis, organogermanium compound

ABSTRACT: In this article, some tertiary ethylenic organogermanium alcohols were synthesized by reacting methylpropyl-, methyl-tert-butyl, methyl-n-butylethynyl carbiols with triethylgermane according to the following reaction



The obtained compounds are: 1-triethylgermyl-3-methylhex-1-ene-3-ol, 1-triethylgermyl-3,4,4-trimethylpent-1-ene-3-ol, 1-triethylgermyl-3-methylhept-1-ene-3-ol, 1-tri-

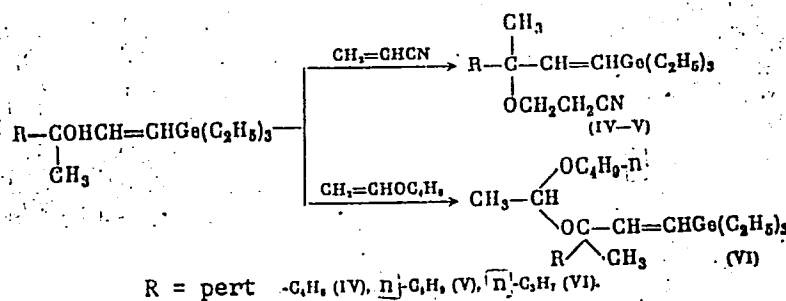
UDC: 547.438.6

Card 1/2

L 04551-67

ACC NR: AP6025992

-ethylgermyl-3,4,4-trimethylpent-1-ene-3-cyanoethyl ether, 1-triethylgermyl-3-methylhept-1-ene-3-cyanoethyl ether, n-butyl-1-triethylgermyl-3-methylhept-1-ene acetal. The presence of hydroxyl group in the obtained organogermanium ethylenic alcohols was proven by cyanoethylation and acetylation by the following scheme:



The table in the article summarizes the properties and elemental analysis of the synthesized compounds. Orig. art. has: 1 figure, 1 table.

SUB CODE: 07/

SUBM DATE: 12Jul65/

ORIG REF: 002

Card 2/2 *plu*

L 06492-67 EWP(j)/EWT(m) RM

ACC NR: AP6028574

SOURCE CODE: UR/0316/66/000/003/0041/0045

AUTHOR: Shikhiyev, I. A.; Rzayeva, S. A.; Guseynzade, B. M.

22
13

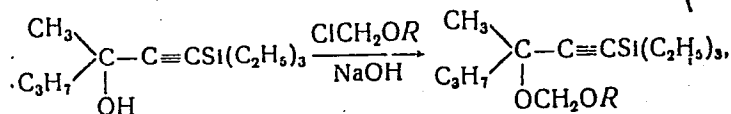
ORG: INKhP AN AzerbSSR

TITLE: Synthesis and conversions of branched organosilicon acetylenic alcohols

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 3, 1966, 41-45

TOPIC TAGS: organosilicon compound, acetylene compound, alcohol

ABSTRACT: The conditions of synthesis of certain branched organosilicon acetylenic alcohols and their reactivity toward α-chloromethyl alkyl ethers were studied on the reaction



where R = CH₃, C₂H₅, n-C₃H₇, n-C₄H₉ and n-C₅H₁₁. The studies showed that the branched γ-silicon-containing acetylenic alcohols in absolute ether in the presence of powdered NaOH react with α-chloromethyl alkyl ethers to form the corresponding organosilicon acetylenic formals. The experimental procedure employed is illustrated with the synthesis of 1-triethylsilyl-3-methyl-1-hexyn-3-ol (for the alcohols) and methyl-(1-tri-

Card 1/2

L 06492-67

ACC NR: AP6028574

ethylsilyl-3-methyl-1-hexyne) formal (for the formal). The physicochemical constants of the synthesized compounds are tabulated. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: 15Jan65/ ORIG REF: 006

Card 2/2 m/ε

SOURCE CODE: UR/0079/66/036/005/6942/6943

AUTHOR: Shiraliyev, I. A.; Abduliyev, N. D.; Aliyev, M. I.

ORG: Institute of Petrochemical Processes, AN AzerbSSR (Institut neftekhmicheskikh protsessov AN AzerbSSR)

TITLE: Investigations in the field of the synthesis and transformations of oxygen-containing unsaturated organogermanium compounds. XXIX. Synthesis and conversions of certain organogermanium monohydric ethylenic alcohols

SOURCE: Zhurnal obshchey khimii, v. 36, no. 5, 1966, 942-943

TOPIC TAGS: organogermanium compound, organic synthetic process

ABSTRACT: Germanium ethylenic alcohols were described and characterized: 1-tributylgermylphenene-1-ol-3 and 1-tributylgermyl-3-3-methylpentene-1-ol-3. The alcohols were synthesized by the reaction of propylethynylcarbinol and methylethylethynylcarbinol with tributylgermane. The presence of hydroxyl groups in the germanium ethylenic alcohols was demonstrated by preparation of the corresponding formals from them under the action of alpha-chloromethyl butyl ether in the presence of dimethylaniline. This reaction was studied for the first time with certain primary, secondary, and tertiary germanium ethylenic alcohols. It was established that alpha-chloromethyl butyl ether reacts more vigorously with tertiary germanium ethylenic alcohols than with primary and secondary alcohols. Orig. art. has: 1 table. [SPS]

Cord 1/1 SUB CODE: 07 / SUBM DATE: 01Apr65 / ORIG REF: 003 UDC 547.317.8 + 546.289

L 16477-66 EWT(m)/ETC(f)/EPF(n)-2/EWG(m) WW

ACC NR: AP6005525

(N)

SOURCE CODE: UR/0089/66/020/001/0017/0021

AUTHOR: Shikhov, S. B.

ORG: none

33

B

TITLE: Taking account of heterogeneous resonance self blocking when setting up multigroup constants for calculating thermal reactors

SOURCE: Atomnaya energiya, v. 20, no. 1, 1966, 17-21

TOPIC TAGS: nuclear engineering, thermal reactor, capture cross section, scattering cross section, resonance absorption, heterogeneous nuclear reactor

ABSTRACT: A method is proposed for taking account of resonance neutron absorption when setting up multigroup constants in calculating heterogeneous reactors. Specific formulas are given for calculating the capture cross section in the k -th group of a multigroup system in the case of narrow resonance, disregarding interference between resonance and potential scattering. Methods are suggested for determining the other cross sections necessary for multigroup calculation and for computing the effective resonance integrals. When the narrowness criterion is not fulfilled, the

Card 1/2

UDC: 621.039.51.134:539.125.523.4

2

Card 2/2 mc

SHIKHIYEVA, F. I.

"Improvement in the Local Assortment of Pears by the Selection Method." Cand Biol Sci, Azerbaydzhan State U imeni S. M. Kirov, Min Higher Education USSR, 1955. (KL, No 11, Mar 55)

SO: Sum No. 670, 29 Sep 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

SHIKHIYEVA, F. I.

USSR/Cultivated Plants - Fruits and Berries.

M-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10986

Author : Shikhiyeva, F.

Inst : Azerbaydzhan Scientific Research Institute of Gardening,
Viticulture, and Subtropical Crops.

Title : New Pear Varieties for the Kuba-Khachmasskaya Zone.

Orig Pub : Sots. s. kh. Azerbaydzhana, 1956, No 12, 19-23

Abstract : A description of six hybrid pear varieties developed by
the Kubinskaya Fruit and Berry Experimental Station of
the Azerbaydzhan Scientific Research Institute of Gardening,
Viticulture, and Subtropical Crops.

Card 1/1

SHIKHEYEVA, L.V.

Extraction of some nonferrous metal ions by naphthenic acids.
Zap. LGI 42 no.3:71-77 '69. (MIRA 17:10)

MITENEV, V.S.; SHIKHLAROV, N.D.

Extracurricular work in high school physics. Fiz. v shkole
17 no.1:94-95 Ja-F '57. (MLRA 10:2)

1. Zaveduyushchiy Kich-Gorodetskim payonnym pedkabinetom
Vologodskoy oblasti. (for Mitenev) 2. 7-ya semiletnyaya shkola
imeni S.M. Kirova, Sal'yany AzSSR. (for Shikhlarov).
(Physics--Study and teaching)

PARYGIN, V.N.; SHIKHLINSKAYA, R.E.

Emission of electron bundles by a goffered wave guide. Nauch.dokl.
vys.shkoly; radiotekh. i elektron. no.2:66-73 ' 58.(MIRA 12:1)

1. Kafedra teorii kolebaniy fizicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

(Microwaves) (Wave guides) (Electrons)

ACCESSION NR: AP4041440

S/0188/64/000/003/0072/0081

AUTHOR: Krasil'nikov, V. A., Shikhlinskaya, R. E.

TITLE: High-frequency region of the noise-formation spectrum of a jet stream

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3, 1964, 72-81

TOPIC TAGS: jet stream, high velocity stream, aerodynamics, jet noise, noise formation spectrum, high frequency jet noise, submerged air stream, Mach eddy wave, barium titanate

ABSTRACT: The article contains a study of the spectrum and directional characteristics of noise emitted by a submerged stream of air escaping from a conical nozzle under excess pressure greater than the critical, that is, greater than 0.9 atmospheres. The results of measurements of the spectral and directional characteristics, compared with photographs of the stream under various conditions, support the belief that the radiation spectrum of the stream includes a discrete radiation, connected with the "cellular" structure of the stream, high-frequency noise, which may be related to "Mach eddy waves",

1/4

Card

ACCESSION NR: AP4041440

and relatively low-frequency noise of turbulent origin. Under the test conditions described in the article, the stream has a periodic "cellular" structure and an axial velocity corresponding to $M = 1$. The dimensions of the "cells" are shown to decrease as the selected pressure p_{sel} is reduced. A block diagram of the experimental set-up may be seen in Figure 1 of the Enclosure. As an audio oscillation receiver, barium titanate ceramic plates were used, oscillating through their thickness at frequencies below the fundamental eigenfrequency. Most of the measurements were conducted with plates of the following parameters: diameter $2R = 6$ mm; thickness $d = 2$ mm (uniform frequency response to about 300 kc) and $2R = 10$ mm and $d = 4$ mm (uniform frequency response to about 180 kc). The sensitivity of the receiving plates was on the order of a few microvolts per bar. Other technical details concerning the test device are given in the article. Graphs are presented which illustrate the directional characteristics of the stream noise at frequencies from 18 to 180 kc and at pressures of 2.1, 3.1 and 4.8 atm. from a nozzle of $D = 5$ mm. The relative distribution of the sound pressure is plotted for angles of

Card 2/4

ACCESSION NR: AP4041440

azimuth of from $\theta = 20^\circ$ to $\theta = 120^\circ$. "The authors thank V. I. Makarov for his valuable advice on the photographic technique." Orig. art. has: 3 formulas and 6 figures.

ASSOCIATION: Kafedro akustiki, Moskovskiy Gos. Universitet (Department of Acoustics, Moscow State University)

SUBMITTED: 25Jul63

ENCL: 01

SUB CODE: PR, ME

NO REF SOV: 001

OTHER: 011

Card 3/4

ACCESSION NR: AP4041440

ENCLOSURE: 01

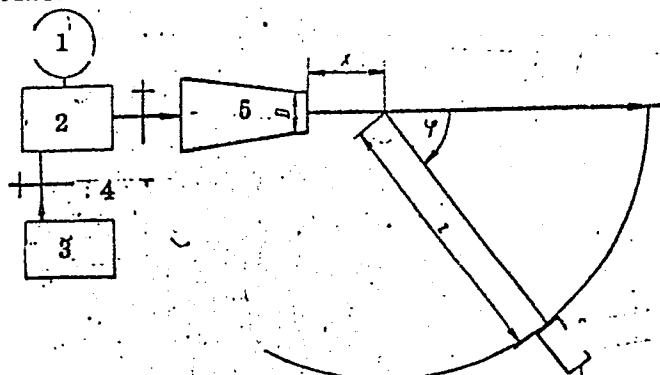


Fig. 1. Block diagram of the set-up; 1 - manometer; 2 - storage area; 3 - com-pressor; 4 - valve; 5 - nozzle, 6 - receiver; 7 - tybe-type voltmeter; 8 - resonance amplifier; 9 - HF filter

Card 4/4

KASHKAY, M.-A.; DUMITRASHKO, N.V.; ANTONOV, B.A.; ABASOV, M.A.; BUDAGOV,
B.A.; VOLOBUYEV, V.R.; LILIIYENBERG, D.A.; MADATZADE, A.A.;
RUSTAMOV, S.G.; KHAIN, V.Ye.; SHIKHALIBEYLI, E.Sh.; SHIKHLINSKIY,
E.M.; AGAYEVA, Sh., tekhn.red.

[Geomorphology of the Azerbaijan S.S.R.] Geomorfologiya Azer-
baidzhanskoi SSR. Baku, 1959. 368 p. (MIRA 12:12)

1. Akademiya nauk Azerbaidzhanskoy SSR, Baku. Institut geografii.
(Azerbaijan--Physical geography)

SHIKHLINSKIY, E.M.

3(5) 30(5)

PHASE I BOOK EXPLOITATION

SOV/1267

Akademiya nauk Azerbaydzhanskoy SSR. Institut geografii

Sovetskiy Azerbaydzhan (Soviet Azerbaydzhan) Baku, Izd-vo AN
Azerbaydzhanskoy SSR, 1958. 759 p. 10,000 copies printed.

Ed.: Aliyev, M.M., Vekilov, Samed Vurgun, Deceased, Mekhtiyev, Sh.F.,
Alampiyev, P.M., and Shikhlinskiy, E.M.; Ed. of Publishing House:
Bagdatlishvili, D.D.; Tech. Ed.: Pogosov, V.A.

PURPOSE: The book is intended for the general reader.

COVERAGE: This is a thorough survey of the geography of Azerbaydzhan, natural resources, industrial potential, and rural economy. The book is made up of a collection of articles on the above subjects, written by authorities in the respective fields. In addition to economic aspects, the book provides a broad historical background and discusses present-day cultural and social life in Azerbaydzhan. The book is richly illustrated, showing many facets of industrial activity. Statistics on areas, population, and production are given; 35 maps accompany the text. There are no references.

Card 1/7

Soviet Azerbaydzhan

SOV/1267

| | |
|--|-----|
| Ch. V. Hydrography (Rustamov, S.G., Candidate in Geography) | 105 |
| Ch. VI. Caspian Sea (Suleymanov Dzh.M., Doctor, and Madat-zade A.A., Candidate in Physics and Mathematics) | 132 |
| Ch. VII. Soil Cover (Salayev E.A., Candidate in Geology and Mineralogy) | 143 |
| Ch. VIII. Vegetation Cover (Prilipko L.I., Doctor in Biology and Akhundov K.F., Candidate in Biology) | 152 |
| Ch. IX. Fauna (Alekperov A.M., Candidate in Biology) | 175 |
| Ch. X. Physico-Geographic Regions (Shikhlinskiy E.M. and Zavriyev V.G., Candidates in Geography) | 199 |

PART III. HISTORY AND CULTURE

| | |
|---|-----|
| Ch. XI. Historical Sketch (Guliyev A.N., Kaziyeu M.A., and Tokarzhevskiy Ye.A., Candidate in History) | 219 |
|---|-----|

Card 3/7

SOV/1267

Soviet Azerbaydzhan

- | | | |
|------------|--|-----|
| Ch. XII. | Population (Kuliyev A.G., Docent) | 305 |
| Ch. XIII. | Education (Dzhabrailbeyli Dzh.A., Candidate in Pedagogics) | 323 |
| Ch. XIV. | Development of Science in the Soviet Azerbaydzhan (Aliyev M.M., Academician, Azerbaydzhan Academy of Sciences) | 335 |
| Ch. XV. | Literature (Gulizade M.Yu., Candidate in Philology) | 363 |
| Ch. XVI. | Architecture (Salamzade A.R., Candidate in Architecture) | 401 |
| Ch. XVII. | Fine and Applied Arts (Gaziyev A.Yu., Candidate in Technical Sciences) | 422 |
| Ch. XVIII. | Music (Gadzhibekov S.I. Stalin Prize Holder and Zeydman B.I., Professor) | 453 |

Card 4/7

Soviet Azerbaydzhan

SOV/1267

1. Apsheron (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 637
2. Kirovabad-Dashkesan (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 659
3. Kura-Araks (Nazirova B.T., Candidate in Geography) 675
4. Lenikoran'-Astara (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 693
5. Nukha-Zakataly (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 705
6. Kuba-Khachmas (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 714
7. Shelmakha-Ismailly (Madat-zade A.A., Candidate in Physics and Mathematics and Zeynalov M.I., Candidate in Geography) 725
8. Kel'badzhar-Kubatly (Madat-zade A.A., Candidate in Physics and Zeynalov M.I., Candidate in Geography) 732
9. Nakhichevanskaya ASSR (Nazirova B.T. and Izmaylov A.R.)

Card 6/7

SOV/1267

Soviet Azerbaydzhan

Candidates in Geography)

737

10. Nagorno-Karabakhskaya AO (Zeynalov M.I. and Zavriyev V.G.,
Candidates in Geography)

754

AVAILABLE: Library of Congress

MM/sfm
3-2-59

Card 7/7

GYUL', K.K., doktor geogr. nauk, prof., red.; ALIYEV, G.B., kand. geogr. nauk, red.; ZAVRIYEV, V.G., doktor geogr.nauk, red.; RUSTAMOV, S.G., doktor geogr.nauk, red.; SHIKHLINSKIY, E.M., kand.geogr.nauk, red.; BAGDAT-LISHVILI, D., red. izd-va; ISMAYLOV, T., tekhn. red.

[Proceedings of the Geographical Society of the Azerbaijan S.S.R.] Trudy Geograficheskogo obshchestva Azerbaidzhanskoi SSR. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR, 1960. 365 p. (MIRA 14:6)

1. Geograficheskoye obshchestvo Azerbaidzhanskoy SSR.
(Azerbaijan--Physical geography)

SHIRAZI, R.M.

Interrelationship of the characteristics of heat balance
and the basic meteorological elements. Izv. AN Azerb. SSR.
Ser. geol.-geog. nauk no.3:101-110 '65. (MIRA 18:9)

SHIKHLINSKIY, E.M.; ALIYEV, V.M.

Joint session of the Academies of Sciences of the Armenian, Georgian,
Azerbaijan S.S.R.; Department of Geological and Geographical Sciences.
Izv.AN Azerb.SSR. Ser.geol.-geog.nauk i nefti no.3:93-95 '61.
(MIRA 15:1)

(Geology) (Geography)

SHIKHLINSKIY, E.M.

Heat balance in the Azerbaijan S.S.R. Izv. AN Azerb.SSR. Ser.geol.
geog.nauk i nefti no.3:85-104 '63. (MIRA 16:11)

SHIKHLINSKIY, Ye.M.

Origin, types, and characteristics of the geographical distribution of dry winds in the Azerbaijan S.S.R. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no. 1: 127-158 '58. (MIRA 11:12)
(Azerbaijan--Winds)

GUSEYNOV, I.A., akademik, red.; IBRAGIMOV, Z.I., prof., red.;
TOKARZHEVSKIY, Ye.A., doktor ist. nauk, prof., red.;
NOVOSARTOV, G.M., kand. ist. nauk, red.; SHIKHLINSKIY,
Z.B., kand. ist. nauk, red.

[From the history of the Soviet labor class in Azerbaijan]
Iz istorii sovetskogo rabocheho klassa Azerbaidzhana. Baku,
Izd-vo AN Azerb.SSR, 1964. 274 p. (MIRA 17:12)

1. Akademiya nauk Azerbaidzhanskoy SSR, Baku. Institut istorii.
2. Chlen-korrespondent AN Azerb.SSR (for Ibragimov).

BLOKHOV, V.P., Gvardii podpolkovnik meditsinskoy sluzhby; ZYUZIN, V.S.,
podpolkovnik meditsinskoy sluzhby; TYUMIN, V.P., podpolkovnik
meditsinskoy sluzhby; SHIKHLYAROV, K.A., mayor administrativnoy
sluzhby

Portable apparatus for taking samples of objects of the external
environment in an epidemic focus. Voen.-med.zhur. no.4:93-94 Ap
'60. (MIRA 14:1)

(EPIDEMIOLOGY—EQUIPMENT AND SUPPLIES)

S. M. T. - 10.11.1954 DEKHOVA, A. Z.

✓ Decolorizing properties of trass. G. Kh. Efendiev, P. E. ~~Fu~~
 Rza-Zade, and A. Z. Shikhmamedbekova. *Trudy Inst.*
~~Khim., Akad. Nauk Azerbaidzhan. SSR~~, 106-109 (1953);
 Referat Zhur., Khim. 1954, No. 45472. — The decolorizing
 properties of trass from the Abastapa deposit for mineral
 oils are described. At elevated temps., around 180°,
 the trass was only slightly effective. At lower temps.,
 around 120°, it was more effective than gumbrin. Mixing
 trass and gumbrin gave good decolorization at elevated
 temps. M. Hoseh

(2)

LFH

ALIYEV, Sh.B.; MAMEDOV, T.I.; ~~SHIKHMAMEDBEKOVA, A.Z.~~; SMIRNOVA, V.Ye.

Photochemical chlorination in propane-butanoic fractions of petroleum gases. Izv. AN Azerb. SSR no.12:53-58 D'54. (MLRA 8:11)
(Paraffins) (Chlorination)

ALIYEV, Sh.B.; SHIKHMAMEDBEKOVA, A.Z.; MAMEDOV, T.I.; SMIRNOVA, V.Ye.

Condensation of chlorine derivatives obtained by the photochemical chlorination of mixtures of gaseous alkanes with benzene. Izv. AN Azerb. SSR no.2:3-10 F'55. (MLRA 8:11)

(Paraffins) (Chlorine compounds)

Shiklunamedbekova, R.

Isomerization of pentenes in dehydration of isoamyl alcohol over aluminum oxide. Yu. G. Mamedov, M. A. Dajin, T. I. Mamedov, A. Z. Shiklunamedbekova, and D. I. Seidov. Doklady Akad. Nauk Azerbaidzhan, S.S.R. 11, No. 10, 675-82 (1955) (in Russian).—Dehydration of cont. iso-AmOH over Al_2O_3 at 380° with 3.65 sec. contact time is accompanied by isomerization, yielding 3-methyl-1-butene, a somewhat larger amt. of 2-methyl-2-butene, and a smaller amt. of 2-methyl-1-butene. G. M. K.

MAMEDALIYEV, Yu.G.; DALIN, M.A.; SHIKHMAMEDBEKOVA, A.Z.

Catalytic dehydrogenation of isopentane in isoprene. Dokl. AN Azerb.
SSR 11 no.12:811-817 '55. (MIRA 9:7)

(Dehydrogenation) (Butane) (Isoprene)

SHIKH, MAMED BEKOVA, A. Z.

Handwritten notes and signatures, including a signature that appears to be "M. Z." and some illegible text.

SHIKHMAMEDBEKOVA, A. Z.

USSR/Kinetics. Combustion. Explosions. Topochemistry. Catalysis. B-9

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26248

Author : Yu.G. Mamedaliyev, M.A. Kalin, A.Z. Shikhmamedbekova, D.I. Sallor

Inst : Academy of Sciences of Azerbaijan SSR

Title : Catalytic Dehydrogenation of Isopentenenes into Isoprene

Orig Pub : Me'ruzeler Azerb. SSR elmer Akad., Dokl. AN Azerb. SSR, 1956, 12, No 8, 547-552

Abstract : The dehydrogenation of 3-methylbutene-1 (I) and 2-methylbutene-1 (II) with the industrial catalysts of the brands K_{12} and K_{16} , which had been proposed earlier for the dehydrogenation of butenes (RZhKhim, 1956, 50637), was studied at 535 to 640°. It was found that also the dehydrogenation of isopentenenes occurred with K_{12} and K_{16} . The yield of isoprene by I reaches 14 to 16% of the raw material treated at 600 to 640° at a volumetric speed of 3.0 to 3.6 lit per lit of the catalyst per hour in case of K_{12} , and the yield by II reaches 15.5 to 18%; in case of K_{18} , the yield of isoprene by I is 22 to 24%, and that by II is 19 to 20% of the treated raw material.

Card : 1/1

7 2 9
 2055. PENTANE-PENTENE FRACTION FROM THERMAL CRACKING. Masadallyev, Yu.
 G., Dalin, H.A., Gaidamashchikov, A.R., Maslov, T.I. and Sotlov, D.I.
 Dokl. Akad. Nauk ~~USSR~~ (USSR Acad. Sci. Ser. B; S.R.), 1956, vol. 12, 623-627;
 Abstr. in Chem. Abstr., 1957, vol. 51, 5124). The pentane-pentene fraction
 from commercial thermal cracking of petroleum was examined by fractional
 distillation and by Raman spectra, the individual components then being
 verified by chemical methods. The fraction contains n-pentane 38%, isopentane
 20%, 2-methyl-2-butene 12%, 3-methyl-1-butene 8%, and 2-methyl-1-butene 5%.

C.A.

gmb
 gmt

DALIN, M.A.; SHIKHMAMEDBEKOVA, A.Z.

Catalytic dehydrogenation of hydrocarbons for the preparation of
butadiene and isoprene. Trudy Inst.khim.AN Azerb.SSR 15:84-98 '56.
(MLBA 9:11)

(Butadiene) (Isoprene)

SHIKHMAMEDBEKOVA, A.Z.

Thermodynamic study of the dehydrogenation of isopentane and
isopentene to isoprene [in Azerbaijani with summary in Russian].
Dokl. AN Azerb. SSR 15 no.4:299-305 '59. (MIRA 12:6)

1. Institut khimii Akademii nauk Azerbaydzanskoy SSR.
(Butadiene) (Isoprene) (Dehydrogenation)

MAMEDALIYEV, Yu.G.; DALIN, M.A.; SHIKHMAMEDBEKOVA, A.Z.; MANEDOV, T.I.

Dehydrogenation of isopentane and isopentenes to form isoprene.
Trudy Inst.khim.AN Azerb.SSR 17:123-130 '59. (MIRA 13:4)

1. Institut khimii AN AzerSSR.

(Butane) (Butene) (Isoprene)

S/595/60/000/000/007/014
E196/E435

AUTHORS: Mamedaliyev, Yu.G., Dalin, M.A., Shikhmamedbekova, A.Z.

TITLE: Some results of research on dehydrogenation of isopentenes to isoprene

SOURCE: Vsesoyuznoye soveshchaniye po khimicheskoy pererabotke neftyanykh uglevodorodov v poluprodukty diya sinteza volokon i plasticheskikh mass. Baku, 1957. Baku, Izd-vo AN Azerb.SSR, 1960. 219-225

TEXT: In their search for an economical raw material for the production of monomers of isoprene rubber, considered the best synthetic rubber now in production, the authors carried out investigations of C₅ fractions contained in thermal and catalytically-cracked gasolines. This was done for the purpose of determining the quantitative relationship between the various pentenes and isopentane of these fractions. The presence and quantity of these isomers was determined chemically and by spectrum analysis; the results are given in Table 2. The dehydrogenation of isopentenes to isoprene was carried out in the presence of industrial catalyst K-12 and K-16, normally used for Card 1/

S/595/60/000/000/007/014
E196/E435

Some results of research ...

conversion of butenes to butadiene. As the dehydrogenation is favoured by the reduction in partial pressures of the reactants, the experiments were carried out either in partial vacuum (180 mm Hg) or with 4 to 10% of steam as diluent, at temperatures ranging from 530 to 630°C with velocities of 1.0 to 2.0 l/lkh. The catalyst was reactivated by passing air during 3 to 4 h at temperatures not exceeding that of the experiment. Best results were obtained with catalyst K-16 at 540°C with velocity 2.0 l/lkh giving isoprene in 25 to 26% yield per pass or 82 to 84% on the decomposed isopentenes. An important conclusion was that the dehydrogenation rates of the three isomeric isopentenes, found in the C₅ fraction from petroleum cracking, are identical. This means that a mixture of isopentenes need not be separated into individual components before dehydrogenation to isoprene. B.S.Korotkevich, A.Z.Dorogochinskiy and A.A.Bashilov are mentioned in the article. There are 2 figures, 6 tables and 8 references, 7 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows. Ref.8: Melpolder F.W., Brown R.A. and others. Industr. Engng. Chem. 1952, 44, no.5.

Card 2/3

Some results of research

S/595/60/000/000/007/014
E196/E435

Table 2

| Hydrocarbon | In C ₅ fraction from thermal cracking, % W/W | In C ₅ fraction from catalytic cracking, % W/W |
|------------------|---|---|
| Isopentane | 20 | 48 |
| n-pentane | 18 | 23 |
| pentene-1 | 12 | 3 |
| pentene-2 fract. | 5 | 5 |
| 3-methylbutene-1 | 8 | 3 |
| 2-methylbutene-1 | 5 | 5 |
| 2-methylbutene-2 | 12 | 14 |

Card 3/3

S/081/61/000/019/059/085
B117/B110

AUTHORS: Shikhmamedbenova, A. Z., Sevost'yanova, N. A., Sadykh-zade, S. I.

TITLE: Study of the dehydrogenation process of butyl benzene in butenyl benzene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1961, 322, abstract 19L20 (Azerb. khim. zh., no. 5, 1960, 37 - 46)

TEXT: Equilibrium constants and equilibrium composition were calculated for the dehydrogenation of secondary $C_4H_9C_6H_5$ to secondary butenyl benzene (I) at 450 - 700°C both without dilution and with dilution by water vapor in molar ratios from 1:9 to 1:15. The activity of the industrial catalysts k-12 (K-12), k-16 (K-16), styrene contact as well as k-67 (K-67) during this reaction at 540 - 630°C was examined. On hydrogenation upon K-67 the yield of I amounts to 16 - 17% at 580°C and at a molar dilution of 1:12. It has chiefly the structure of α -ethyl styrene and contains α , β -dimethyl styrene impurities. [Abstracter's note: Complete trans-lation.]
Card 1/1

S/081/62/000/024/051/052
B166/B186

AUTHORS: Shikhmamedbekova, A. Z., Sadykh-zade, S. I.

TITLE: Synthesis and polymerization of 2-phenylbutadi-1,3-ene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24 (II), 1962, 1061,
abstract 24R198 (Azerb. khim. zh., no. 1, 1962, 73-77
[summary in Azerb.])

TEXT: 2-Phenylbutadi-1,3-ene (I) was synthesized in two ways: (1) from acetophenone and vinyl-magnesium-bromide, followed by decomposition of the complex thereby produced with NH_4Cl solution and then by dehydration of the methylvinyl-phenyl-carbinol; (2) from α -methylstyrene and formaldehyde followed by pyrolysis of the 2-phenyl-4-acetoxide-1-butene thus produced at 500°C , 20 mm Hg. I was polymerized over catalytic system $\text{Al}-(\text{iso-C}_4\text{H}_9)_3-\text{TiCl}_4$ and emulsion copolymerization of I and divinyl was also carried out. [Abstracter's note: Complete translation.]

Card 1/1

SHIKHMAMEDBEKOVA, A.Z.; MUSAYEVA, E., red.; NASIROV, N., tekhn.red.

[Dehydrogenation of isopentenes to isoprene] Degidrirovanie izopentenov v izopren. Baku, Azerneshr, 1963. 65 p.
(MIRA 17:1)

(Pentene) (Isoprene)

SADYKHZADE, S.I.; SHIKHMAMEDBEKOVA, A.Z.; YUL'CHEVSKAYA, S.D.;
SALAKHOVA, S.Kh.; RZAYEVA, A.S.

Condensation of vinylacetylene with α -chloroethers.
Azerb. khim. zhur. no.2:37-44 '63. (MIRA 16:8)

MEHMOOV, Sharifal; SHIKHMAMEDBEKOVA, A. A.; KHYDYROV, P. N.

Glycol esters and their derivatives. Part 76. Synthesis of
alkoxymethyl ethers of p-iodobenzyl alcohol. *Ann. ob. Khim.*
34 no.6:1818-1824 Je '64. (MIRA 17:7)

1. Institut neftkhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

LIBERTEV, I.I.; NIKOLAYEVA, N.A.; SHIKHMAN, Ye.V.

Simultaneous determination of carbon, hydrogen and thallium
in complex compounds. Zhur. anal. khim. 20 no.7:832-835 '65.
(MIRA 18:9)

1. Institute of High Molecular Weight Compounds, U.S.S.R.
Academy of Sciences, Leningrad.

MAMEDALIYEV, Yu.G.; DALIN, M.A.; MAMEDOV, T.I.; SHIKHMAMEDBEKOVA, Z.A.;
SAYLOV, D.I.

Isomerization of pentenes in the dehydration of isoamyl alcohol
on aluminum oxide. Dokl.AN Azerb.SSR 11 no.10:675-682 '55.
(MLRA 9:2)

1.Institut khimii AN Azerb. SSR.
(Isomers and isomerization) (Pentene) (Alcohols)

SHIKHMAMEDBEKOVA, Z. A.
MAMEDALIYEV, Yu.G.; DALIN, M.A.; SHIKHMAMEDBEKOVA, Z.A.

Dehydrogenation of isopentenes to isoprene under reduced pressure.
Dokl. AN Azerb. SSR 13 no.9:961-965 '57. (MERA 10:9)

1. Institut khimii.
(Pentene) (Isoprene) (Dehydrogenation)

SHIKHMAMEDBEKOVA, A.Z.

MAMEDALIYEV, Yu.G.; DALIN, M.A.; SHIKHMAMEDBEKOVA, A.Z.

Analyzing the pentane-pentene fraction of catalytic cracking. Dokl.
AN Azerb. SSR 13 no.11:1159-1164 '57. (MIRA 10:12)

1. Institut khimii AN AzerSSR.
(Petroleum--Analysis)

SHIKHMAN, L.

Planning the material and technical supply of ship repairing yards. Mor. flot. 24 no.11:31-33 N '64. (MIRA 18:8)

1. Starshiy inzh., rukovoditel' planovoy gruppy Sudoremontnogo zavoda No.1.

SHIKHMAN, M. G.

SSR/Metals

Low Temperature Research
Resilience

Sep 48

Resilience of Metals at -253°C , V. I. Kostenets, B. G. Lazarev, V. I. Khotkevich,
M. G. Shikhman, 6 $\frac{1}{2}$ pp

Izv. Akad. Nauk SSSR, Ser. Fiz. Khim. Vol XVIII, No 9

Describes technique for rapid measurement of resilience of specimens at temperatures of liquid nitrogen and liquid hydrogen (-196 and -253°C). Measures resilience at -196 and 253°C of three types of metals: copper M-3, brass AC63, and brass AC-59.
Submitted 3 Apr 48.

32/49T62

LEBEDEVA, A.I.; NIKOLAYEVA, N.A.; ORESTOVA, V.A.; SHIKHMAN, Ye.V.

Microdetermination of carbon and hydrogen in thallium-containing
complex compounds. Izv. AN SSSR. Ser.khim. no.3:574-576 Mr '64.
(MIRA 17:4)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.

SHIKHMANOV, Ya.M., inzh.

Assure excellent quality of work on the Bukhara - Ural Mountain Region
route. Stroi. truboprov. 7 no.6:3-4 Je '62. (MIRA 15:7)

1. Teploekstantsiya, Sazakino.
(Gas, Natural—Pipelines)

SHIKHMANOV, P.I.

Mnogokratnaia zatochka nozhovochnykh poloten. Vestn. Mash., 1950, no. 12, p. 47.

Multiple grinding of hack saw blades.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

PANTELEYEV, Ye.; SHIKHMANOV, S.

Operational methods used by yards for handling heavyweight
and long trains. Zhel.dor.transp.36 no.5:32-38 My '55.
(MIRA 12:5)

1. Glavnyy inzhener stantsii Lyublino Moskovsko-Kursko-Donbas-
skoy dorogi (for Panteleyev). 2. Nachal'nik stantsii Lyublino
Moskovsko-Kursko-Donbasskoy dorogi (for Shikhmanov).
(Railroads--Yards) (Railroads--Switching)

SHIKHMANOV, Sergey, Ivanovich

ZHUKOV, Dmitriy Alekseyevich; SHIKHMANOV, Sergey Ivanovich; BERNGARD, K.A.,
kandidat tekhnicheskikh nauk, redaktor; KHITROV, P.A., tekhnicheskiy
redaktor.

[Expedition of local freight; work practice of a dispatcher in the
A.G.Karpychev section] Uskorenniy razvoz mestnogo gruzha; opyt de-
zhurnogo po otdeleniyu A.G.Karpycheva. Moskva, Gos. transp. zhel-
dor. izd-vo, 1954. 34 p. (MIRA 8:1)
(Railroads--Freight)

USSR/Cultivated Plants. Fruits. Berries.

M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68320

Author : Shikhmatov, B., Khloptseva, I.

Inst : -

Title : Prospects for the Development of Horticulture
in the Zailiyskiy Ala-Tau Mountains.

Orig Pub : S. Kh. Kazakhstan, 1967, No 8, 54-59

Abstract : A description is given of the factors existing in the natural conditions of the Zailiyskiy Ala-Atu mountains which favor the development of fruit production [fructiculture]; It is recommended that species and strains should be selected for the low mountainous (900-1,200 meters above sea level), middle mountainous (1,200-1,500 meters above sea level) and

Card : 1/2

151

SHKUNDOVA, E. A.

Shkundoval, E. A.

"The Detection of Pollenators and Self-Pollenators for the Basic Standard Varieties of Large Strawberries (*Fragaria grandiflora* Ehrh.) in Krasnodar Kray." *in Higher Education USSR. Kuban' Agricultural Inst. Krasnodar, 1955 (Dissertation for the Degree of Candidate in Agricultural Sciences)

SO: Knizhnaya letopis' No. 27, 2 July 1955

124-57-2-2436

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 132 (USSR)

AUTHORS: Shikhobalov, S. P., Krasnov, V. M., Maksutova, T. D., Tseyts, V. V., Edel'shteyn, Ye. I.

TITLE: Experimental Investigation of the Stresses in a Hydraulic-turbine Blade (Eksperimental'noye issledovaniye napryazhennogo sostoyaniya lopasti vodyanoy turbiny)

PERIODICAL: V sb.: Vopr. prochnosti lopastey vodyanoy turbiny, Leningrad, Izd-vo LGU, 1954, pp 174-216

ABSTRACT: Presentation of an experimental investigation of the stresses prevailing in a hydraulic-turbine blade subjected to the action of a pressure uniformly distributed over its working surface. The investigation was conducted by means of the photoelastic method, wherein the model was "frozen" and subsequently sectioned off. The model was made of bakelite; the bakelite resin was cast into a mold made of a readily fusible alloy. The uniform pressure was exerted by means of a system of glass rods located vertically on the working surface of the blade. In the determination of the stresses due to the edge effect, use was made of data on the "edge effect" in a bakelite wedge having a thickness equal

Card 1/2

124-57-2-2436

Experimental Investigation of the Stresses in a Hydraulic-turbine Blade

to the thickness of the blade profile and subjected to the same thermal and other conditions as the blade model, but free of any external forces. It is shown that in the bakelite used an "edge effect" arises as a result of desiccation, i. e., the separation of component substances, mainly water and phenol, and that a working medium may be found in which the "edge effect" does not occur. In a practical attempt to avoid any "edge effect" the model was loaded in a water-glycerol mixture and was protectively coated with latex. The interpretation of the stress conditions in the blade was performed according to the formulas of three-dimensional photoelasticity. The results lead to the conclusion that the blade, considered as a shell with variable thickness, is subjected to pure moment stresses. A comparison with L. M. Kachanov's solution (Rzh Mekh, 1955, abstract 906) is also adduced.

V. M. Krasnov

1. Turbine blades--Stresses 2. Stress analysis

Card 2/2

SHIKHOBALOV S. P.

AUTHORS: Maksutova, T. D., Shikhobalov, S. P., 32-2-45/60

TITLE: The Building of Complex Form Models For the Optical Method of Tension Investigations (Izgotovleniye modeley slozhnykh form dlya opticheskogo metoda issledovaniya napryazheniy)

PERIODICAL: Zavodskaya Laboratoriya. 1958, Vol. 24, Nr 2, pp. 231-233 (USSR)

ABSTRACT: In order to destroy the "edge effect" in optically active materials a method of modelling was developed which also renders a mechanical treatment of the finished models unnecessary. The method is based on the casting of synthetic resin in metal molds, and on the out-polymerization of the resin used here. With this attention must be paid to the possibility of the escape of bubbles. A table is given of those synthetic resins that can be used here, and of their specific properties. With a bakelite casting a strong edge effect could be noticed whilst the best results were given by "epoxy-resins" with maleic anhydride as hardener. The undecomposable model molds should consist of metal alloys with a narrow melting range (a little above the maximal polymerization temperature of the synthetic resin) so that they can easily be melted off after the resin polymeriza-

Card 1/2

The Building of Complex Form Models For the Vertical Method 32-2-45/60
of Tension Investigations

tion. A table of suitable alloys is given. The model molds themselves can be cast in plaster. An alloy of 40% Pb, 40% Sn, 20% Sb is said to be of good castability and is recommended for decomposable model molds. The method described makes it possible to construct models with an exactitude of $\pm 0,05$ mm. There are 2 figures, 2 tables, and 7 references, 4 of which are Slavic.

ASSOCIATION: Leningrad State University imeni A. A. Zhdanova (Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova)

AVAILABLE: Library of Congress

1. Resins-Molding

Card 2/2

Shikhobalov, S.P.

TABLE 1 BOOK EXHIBITION

807/1012

Scientific Publications

Polarization-optically method isobarically degradable truly homogeneous
15-21 February 1988 (Optical Polarization Method for Stress Analysis)
Transactions of the Conference of February 15-21, 1988. (Published) 140
Leningradskiy uni., 1980. 651 p. Extra 515 inserted. 7,400 copies printed.

Bepp, M.I. S.P. Shikhobalov, M.I. V.Y. Shikhobalov, Fed. M.I. S.D. Yodoladze
Material Board, S.D. Oskan, L.M. Koshov, V.M. Koshov, I.D. Koshov,
M.I. Prikovskiy, V.M. Prikovskiy, S.D. Koshov, and V.I. Koshov.

REMARKS: This collection of 38 articles is intended for scientists and engineers
concerned with experimental stress analysis of machine parts and structural
components.

CONTENTS: The collection contains reports presented at the conference on optical
polarization and stress analysis held February 15 - 21, 1988, in the
Republic of China, the Polish People's Republic, the German Democratic Republic,
and the Republic of Czechoslovakia. The reports discuss general theoretical
problems and new methods of investigation and describe apparatus and materials
used in the optical method. Solutions of specific three-dimensional and three-
dimensional problems occurring in shipbuilding, aircraft design, engine con-
struction, in various branches of heavy and light engineering, in structural mechanics,
aviation, hydraulic structures, railroad transport, in structural mechanics,
industry, etc., are given. Solution of the three-dimensional problems by means
of the method of optical polarization is introduced and the use of this method for
the solution of problems associated with plasticity, creep, dynamics, hydro-
dynamics, etc., is demonstrated. Reports previously published elsewhere are
printed here in abbreviated form. No personal files are enclosed. References
are listed at the end of the reports.

3. Shikhobalov, M.I. (Czechoslovakia). Investigations with Optical Polarization
Methods at the Czechoslovak Academy of Sciences 14

II. PROBLEMS IN STRESS BY INVESTIGATION TECHNIQUES FOR
THREE-DIMENSIONAL AND TWO-DIMENSIONAL PROBLEMS

6. Shikhobalov, S.P. Some Problems in the Investigation of the Three-
Dimensional Problems by the Optical Polarization Method 57

7. Gibson, S.O., and O.Y. Koshov. Determination of Calculated Stress
According to Theory IV of Strength in Three-Dimensional Photoelastic Models 65

8. Koshov, V.M. On Transverse Isotropy in Photoelasticity 72

9. Fomkin, L.M. On the Solution of a Three-Dimensional Problem by the
Optical Method 82

17. Shikhobalov, M.I. (Czechoslovakia). Use of a Set Methods for Determining
the Stress of Internal Stresses in the Two-Dimensional Problem of
Photoelasticity 143

18. Dobry, V.I. On the Experimental Measure-Angle Method 149

III. OPTICALLY ACTIVE MATERIALS

19. Koshov, V.M. Optically Active Materials Used in Laboratory Practice 151

20. Koshov, V.M., and V.A. Shikhobalov. Use of Chiral Polymers and
Spiral Beams for the Synthesis of Optically Active Materials 161

21. Koshov, V.M. (Czechoslovakia). A New Czechoslovak Photoelastic
Material "Kishopolan" 170

IV. INVESTIGATIONS FOR OPTICAL-POLARIZATION INVESTIGATIONS

22. Koshov, V.M. Instruments of the Scientific Research Institute
for Mechanical and Mechanics of the LVI (Leningrad State University)
for Stress Analysis by the Optical Polarization Method
and 5/12 174

23. Shikhobalov, M.I. The Optical Method as an Illustration in the
Course on Strength of Materials 146

SHIKHOBALOV, S.P., otv.red.; GUTMAN, S.G., red.; KACHANOV, L.M., red.;
KRASHOV, V.M., red.; MAKSUTOVA, T.D., red.; PRIGOROVSKIY, N.I.,
red.; PROSHKO, V.M., red.; ROZANOV, N.S., red.; EDEL'SHTEYN,
Ye.I., red.; SHCHEMELEVA, Ye.V., red.; VODOLAGINA, S.D., tekhn.red.

[Polarization optical method for stress analysis; proceedings of the
conference of February 13-21, 1958] Poliarizatsionno-opticheski
metod issledovaniia napriazhenii; trudy konferentsii 13-21 fevralia
1958 goda. Leningrad, Izd-vo Leningr.univ., 1960. 450 p.
(MIRA 13:6)

(Strains and stresses) (Optical measurements)

BUGAKOV, I.I.; SMIRNOVA, V.P.; SHIKHOBALOV, S.P.

Simulating the creep of the T-tail of turbine blades.
Issl. po uprug. i plast. no.3:192-207 '64

(MIRA 18:4)

ACCESSION NR: AT4034322

S/2753/64/000/003/0192/0207

AUTHOR: Bugakov, I.I.; Smirnova, V.P.; Shikhobalov, S.P.

TITLE: Simulation of creep in the T-tails of turbine blades

SOURCE: Leningrad. Universitet. Matematiko-mekhanicheskiy fakul'tet.
Issledovaniya po uprugosti i plastichnosti, no. 3, 1964, 192-207

TOPIC TAGS: turbine blade, turbine blade tail, T-tail design, tail creep characteristic, celluloid tail model, polarization microscopy analysis, tail support method, tail parameter effect, stress concentration pattern, tail stress distribution, stress direction reversal, stress redistribution period, steel creep, austenitic steel

ABSTRACTS: Creep in the T-tails of turbine blades was analyzed on celluloid models (modulus of elasticity $19,000 \text{ kg/cm}^2$, temperature function $b = 0.021 \text{ cm}^2/\text{kg}$ at $18-19^\circ\text{C}$) by means of polarization microscopy. Models (see Fig. 1 in the Enclosure) had relative dimensions $\bar{a} = 0.07, 0.11$ or $0.18, \bar{d} = 1.78, \bar{h} = 0.645$, were stressed by applying a constant load (average tensile stress in the neck of a tail was 70 kg/cm^2) and were tested at $18-19^\circ\text{C}$ in two variants of tail support placement (see Fig. 2 in the Enclosure) to determine the

Card 1/5

ACCESSION NR: AT4034322

ASSOCIATION: Matematiko-mekhanicheskiy fakul'tet Leningradskogo universiteta
(Department of Mathematics and Mechanics, Leningrad University)

SUBMITTED: 00

DATE ACQ: 30Apr64

ENCL: 02

SUB CODE: PR, MM

NO REF SOV: 005

OTHER: 005

Card

3/5

L 42311-66 ENT(d)/ENT(m)/ENP(w)/ENP(v)/ENP(t)/ETI/ENP(k)/ENP(h)/ENP(l)/I LRP(2)

ACC NR: AT6014515 (A,N) JD/WW/EM SOURCE CODE: UR/2753/65/000/004/0159/0165

AUTHORS: Bugakov, I. I.; Smirnova, V. P.; Shikhobalov, S. P.

ORG: none

TITLE: A study of stress concentrations in T-shaped shanks of turbine blades in conditions of elasticity and creep

SOURCE: Leningrad. Universitet. Matematiko-mekhanicheskiy fakul'tet. Issledovaniya po uprugosti i plastichnosti, no. 4, 1965, 159-165

TOPIC TAGS: stress analysis, stress distribution, turbine blade, elasticity, creep, polarimeter / KSP-6 polarimeter

ABSTRACT: Results are presented from a study of stress concentrations in T-shaped shanks of turbine blades with relative dimensions $D/d = 1.58$ and $h/d = 0.625$ (see Fig. 1). The analysis of stress concentrations was performed by the methods of photoelasticity and photocreep. The study was performed on planar models under constant external loading, which is a simulation of the centrifugal force of the blade. The models were prepared according to a metallic template with relative dimensions of $r/d = 0.010, 0.0417, 0.0625$, and 0.1250 . The models were prepared from a mixture of PN-1 in 30% styrol. Details of the preparation of specimens are given. Instruments used in the testing included a KSP-6 polarimeter, an SKK-2 compensator, and a Martens tensometer. The stress concentration coefficient k was determined

Card 1/3

L 42311-66

ACC NR: AT6014515

stresses, t is the time, and ν is Poisson's coefficient. Six plots of the creep and elastic deformation characteristics are shown. Orig. art. has: 3 equations and 7 figures.

SUB CODE: 13,20/ SUBM DATE: 07Apr64/ ORIG REF: 003/ OTH REF: 001

Card 3/3

ACC NR: AT7002117

the optical variables commenced immediately after the loading and were carried out in certain intervals right up to the onset of the steady creep. The stress concentration coefficient is derived from the rheological expression for material creep. For discs with small apertures the stress concentration factor was determined from the experimental data. The dependence of the stress concentration factor from the load was also determined experimentally and plotted for T-head mounts of the turbine blades, both for a perfect fit and the presence of a gap. The investigations showed that the greatest tensile stress occurs in the tail end of the blade and in the rim of the disc. Orig. art. has: 8 figures.

SUB CODE: ^{10/}~~15-117~~

SUBM DATE: 14Jun66/

ORIG REF: 005/ OTH REF: 001

Card 2/2

SMIRNOVA, S.V.; TSEYTTIS, V.V.; SHIKHOBALOV, S.F.

Using the optical polarization method in investigating the
stressed state of blades of a bucket-wheel hydraulic turbine.
Issl.po uprug.i plast. no.1:139-146 '61. (MIRA 15:2)
(Blades—Testing)

SHIKHOBALOVA, L. P.

USSR/Chemistry - Surface Tension
Chemistry - Crystallization

May 1947

"Surface Tension and Crystallization--I: The surface Tension of Melted Salts," V. K. Semenchenko, L. P. Shikhobalova, 10 pp

"Zhur Fiz Khim" Vol XXI, No 5

Experiments carried out on melted salts with temperatures of 315 to 900 degrees C. Graphs, table and diagrams included. For the theoretical explanation of the effect of salt, there was evolved the formula which determines the relative deliquescence of crystals from concentrations of ingredients measurements of crystals and their surface tension. Published 10 Nov 1946. Moscow State University, imeni Lomonosov, Laboratory of the Physics of Solutions.

PA 18T93

| | | | |
|--|--|--------------------------|--|
| 117 AND 118 ELEMENTS | | 140 AND 141 ELEMENTS | |
| COMMON ELEMENTS | | COMMON VARIANTS INDEX | |
| MATERIALS INDEX | | OPEN | |
| <p>ca SHIKHOBALOVA L. P. 2</p> <p>Surface tension of solutions of molten salts. II. V. K. Semenchenko and L. P. Shikhobalova (State Univ., Moscow). <i>J. Phys. Chem. (U.S.S.R.)</i> 21, 707-14 (1947) (in Russian); cf. <i>C.A.</i> 41, 8788f. Surface tension σ of 5 binary melts was detd. by the method of the max. bubble pressure. The σ of unmixed salts at 900° and 1100°, resp., are: Li_2SO_4 224 and 211 dynes/cm., NaCl 100 and 95, KCl 91 and 76, RbCl 83 and 60, CaCl_2 72 and 59 (at 1050°), and BaSO_4 175 (1000°) and 172 (1050°). K_2SO_4 at 1076° has $\sigma = 144.3$. The error is ± 1 dyne/cm. The σ of Li_2SO_4 is lowered by the above chlorides, more so the smaller the σ of the chloride. At about 1-5 mol. % of the chloride σ is independent of its concn.; otherwise, the curve of σ against mole fraction is regular and slightly convex toward the origin of the coordinates. The curve for $\text{Li}_2\text{SO}_4 + \text{BaCl}_2$ has a min. (163 at 1000°) at the equimol. compn. For all melts the curve of σ against temp. is slightly concave toward the origin of the coordinates. The value of σ is detd. by the "generalized moment" of the ion, i.e., its charge divided by its crystallographic radius. The greater the difference between the "generalized moments" of the ions of solvent and solute, the greater the surface activity. J. J. Bikerman</p> | | | |
| ASB-51A METALLURGICAL LITERATURE CLASSIFICATION | | | |
| FROM SYNDICATE | | FROM BOMBAIV | |
| SUBORDINATE ONE | | SUBORDINATE ONE | |
| SUBORDINATE TWO | | SUBORDINATE TWO | |
| SUBORDINATE THREE | | SUBORDINATE THREE | |
| SUBORDINATE FOUR | | SUBORDINATE FOUR | |
| SUBORDINATE FIVE | | SUBORDINATE FIVE | |
| SUBORDINATE SIX | | SUBORDINATE SIX | |
| SUBORDINATE SEVEN | | SUBORDINATE SEVEN | |
| SUBORDINATE EIGHT | | SUBORDINATE EIGHT | |
| SUBORDINATE NINE | | SUBORDINATE NINE | |
| SUBORDINATE TEN | | SUBORDINATE TEN | |
| SUBORDINATE ELEVEN | | SUBORDINATE ELEVEN | |
| SUBORDINATE TWELVE | | SUBORDINATE TWELVE | |
| SUBORDINATE THIRTEEN | | SUBORDINATE THIRTEEN | |
| SUBORDINATE FOURTEEN | | SUBORDINATE FOURTEEN | |
| SUBORDINATE FIFTEEN | | SUBORDINATE FIFTEEN | |
| SUBORDINATE SIXTEEN | | SUBORDINATE SIXTEEN | |
| SUBORDINATE SEVENTEEN | | SUBORDINATE SEVENTEEN | |
| SUBORDINATE EIGHTEEN | | SUBORDINATE EIGHTEEN | |
| SUBORDINATE NINETEEN | | SUBORDINATE NINETEEN | |
| SUBORDINATE TWENTY | | SUBORDINATE TWENTY | |
| SUBORDINATE TWENTY-ONE | | SUBORDINATE TWENTY-ONE | |
| SUBORDINATE TWENTY-TWO | | SUBORDINATE TWENTY-TWO | |
| SUBORDINATE TWENTY-THREE | | SUBORDINATE TWENTY-THREE | |
| SUBORDINATE TWENTY-FOUR | | SUBORDINATE TWENTY-FOUR | |
| SUBORDINATE TWENTY-FIVE | | SUBORDINATE TWENTY-FIVE | |
| SUBORDINATE TWENTY-SIX | | SUBORDINATE TWENTY-SIX | |
| SUBORDINATE TWENTY-SEVEN | | SUBORDINATE TWENTY-SEVEN | |
| SUBORDINATE TWENTY-EIGHT | | SUBORDINATE TWENTY-EIGHT | |
| SUBORDINATE TWENTY-NINE | | SUBORDINATE TWENTY-NINE | |
| SUBORDINATE THIRTY | | SUBORDINATE THIRTY | |

SHIKHOBALOVA L. P.

Surface tension of solutions of molten salts. III.
V. K. Semenchuk and L. P. Shikholova (State Univ.,
Moscow). *J. Phys. Chem.* (U.S.S.R.) 21, 1287-1401
(1947) (in Russian); cf. C.A. 43, 2155. —The surface
tension σ of molten alkali sulfates steeply decreases on
addn. of alkali chlorides, then remains const., and de-
creases again to the σ of molten chlorides. The σ of
mixts. of Li_2SO_4 with NaCl , KCl , RbCl , and CsCl is
const. between 1 and 2, 1 and 2, 0.5 and 1, and 0.35 and
1 mol. %, resp., of the chloride. The σ of mixts. of
 Na_2SO_4 with NaCl , RbCl , and NaI is const. between
1 and 2, 1 and 2, and 0.35 and 1% of the halide; and the
 σ of mixts. of K_2SO_4 with KCl and RbCl is const. between
1 and 2, and 1 and 4%, resp., of the chloride. There is
no region of const. σ in the system LiCl-RbCl . The σ
of Na_2SO_4 at 900° and 1000° is 192 and 183 dynes/cm.,
resp.; and of LiCl and RbCl at 780°, 127 and 96 dynes/
cm., resp. The adsorption calcd. from σ passes through
2 max. The 1st max., at small chloride concns., is con-
nected with the adsorption of Cl^- , and the 2nd max. repre-
sents adsorption of cations. Equations are derived for the
relation between σ , concn., and the "generalized moments"
of the ions; they account for the exptl. σ -concn. curves.
J. J. Bilberrman.

SHCHERBINA, V. P. and SHCHERBINA, L. I.,

1945. Ascidinotsiya askeridoza i trikhotsfalioza v sarmenii ot
kirovskikh i klinicheskikh faktorov. Med. parazit. i parazit. Bol., No. 4

SHIKHOBALOVA, N. P.

Mbr., Lab. Helminthology, Dept. Biol. Sci., Acad. Sci., -1947-48-. "On the Morphological Nature and Taxonomic Value on Nematodes Belonging to the Genera Dicheilonema Dies, 1861 and Monopetalonema Dies, 1861," Dok. AN, 47, No. 5, 1945; "On the Taxonomic Position of the Genera Acanthocheilonema Cobbold and Molinema Freitas et Lent within the System of Nematodes," ibid., No. 7, 1945; "System of Reclassification of Heterakidae of Class Nematoda," ibid., 58, No. 4, 1947; "Changes in the System of the Nematoda Subuluridae," ibid., 60, No. 1, 1948:

SHIKHOBALOVA, N. P.

Nov 1947

USSR/Medicine - Nematodes
Medicine - Taxonomy

"System of Reclassification of Heterakidae of Class Nematoda," Academician K. I. Skryabin,
N. P. Shikhobalova, Laboratory of Helminthology, Academy of Sciences of the USSR, 2 $\frac{1}{2}$ pp.

"Dok Ak Nauk" Vol LVIII, No 4

Up to the present, Heterakidae were classes as a subfamily of subuluridea, which with
the Oxyuridea are included in the order of Oxyurata skryabin. Author presents several
points of identification for the subfamily Aspidoderinae. Submitted, 8 Sep. 1947.

PA 38T79

SHRYARIN, K. I. AND SHIKHOPALOVA, N. P.

Mer., Helminthology Laboratory, Acad. Sci. 1947

"The Separation of the Nematode Heterakis into Generic Components,"

Dok. AN. SS. no. 8, 1947.

SHUKHOPALOVA, N. P. and LEYKINA YE. S.

1948. Ickusstvennaya immunizatsiya pri gel'mintozakh. Tr. Gol'mint.
laboratorii anSSSR, t. I, str. 93-114.

SHIKHOBALOVA, N. P.

Shikhobalova, N. P. - "Lendana corvicola nov. sp., a new species of filaria of the Corvidae", Sbornik rabot po gel'mintologii (Vsesoyuz. in-ta gel'mintologii im. akad. Skryabina), Moscow, 1948, p. 245-46.

SO: U-3042, 11 March 1953, (letopis 'nykh Statey, No. 10, 1949).

SHIKHOBALOVA, N. P., GORODILOVA, L. I. and ISAICHEVA, A. I.

"The Role of the Process of Migration of the Population in the Epidemiology of Trichocephalosis and Ascaridiasis", Med. Paraz. i Paraz. Bolez., Vol. 17, No. 2, pp 126-31, 1948.

SHIKHOBALOVA, N. P.

Shikhobalova, N. P.- "An experimental study of immunity in trichocephaliasis", Trudy Gel'mintol. laboratorii (Akad. nauk SSSR), Vol. 11, 1949, p. 5-25, - Bibliog: p.23-25.

SO:- U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

SHIKHOBALOVA, N. P.

Shikhobalova, N. P. - "Trichocephaliasis (epidemiology and immunology)", (Thesis of a doctoral dissertation), Trudy Gel'mintol. laboratorii (Akad. nauk SSSR), Vol. 11, 1949, p. 208-12.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

SHIKHOBALOVA, N.P.

SKRIBIN, K.I., and SHIKHOBALOVA, N.P.

"Soviet Helminthology in the light of the michurinite
teaching."

SO: Veterinariya 26(5), 1949, p. 22

SHIKHOBALOVA, N. F.

Science

Problems in immunity in helminthiasis. Moskva, Izd-vo Akademii nauk SSSR, 1950.

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, April 1952. Uncl.

SHIKHOBALOVA N. P.

USSR/Medicine - Immunology

1950

"Theoretical and Practical Problems of the Study of Immunity in Helminthoses," N. P. Shikhobalova

"Trudy Gel'mintolog Lab Ak Nauk SSSR" Vol III, pp 74-79

Mentions difficulty of cultivating helminths in vitro, but states that progress has been achieved in that respect. States size and definite localization of helminths are of advantage, because (1) the particular helminth tissue that contains the antigen can be isolated; (2) the action of the immunized organism on the locally fixed helminth can

181W65

1950

USSR/Medicine - Immunology (Contd)

be observed. Describes USSR work on the isolation of helminthic polysaccharide antigens.

181W65

СЕРВАН, Г. И.; ВЕНУСОВ, В. П.; КОЗЛОВ, А. А.

1951. Справочник и указатель. Справочник паразитических насекомых
ред. Акад. К. И. Станкин, т. II Изд. АН СССР, стр. 631.

SHIKHOBALOVA, N. P.
SKRYABI, N. I., SHIKHOBALOVA, N. P.

Nematoda

Reorganization of classification of Nematoda suborder Oxyurata Skrjabin, 1923.
Trudy G31'm. lab. no. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, UNCL.

SHIMOBALOVA, N. F., KUSTOVA, L. I., KOSILOV, A. M.

Worms, Intestinal and Parasitic

Effect of ascarids on vitamin A content in chick liver, Trudy Gel'm. lab. no. 5, 1951.

9. Monthly List of Russian Accessions. Library of Congress, September 1952. UNCL.

SHIKHOBALOVA, N.P. 1

PRASOLOVA, M.A.

1952. Eksperimental'nye issledovaniya po immunitetu pti trikhinelleze. Razvitie trikhinell pri intensivnom i slabom zarazhenii eksperimental'nykh zhivotnykh. Tr. gel'mint. Laboratorii AN SSSR, t. VI, str. 52-59.

SHIMONOV, M. D.

Esperimo Shimonov: Isosleevaniya - "Trishinelleze, "Works
on Belov's Isos", on the 75th Birthday of K. I. Skryabin, Isos, Alex. Mark,
1955, page 61. 1955. 1955.
Belov's Isos, 1955, 1955.

SHIKHOBALOV, N. P.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

| <u>Name</u> | <u>Title of Work</u> | <u>Nominated by</u> |
|--------------------|-----------------------------------|--|
| Shikhobalov, N. P. | "Handbook of Parasitic Nematodes" | Laboratory of Helminthology, Academy of Sciences USSR |

SO: W-30604, 7 July 1954

SKRYABIN, K.I., redaktor; SHIKHOBALOVA, N.P.; SHUL'TS, R.S.; IVASHKIN, V.M.,
redaktor; ALEKSEYEVA, T.V., ~~tekhnicheskii~~ redaktor.

[Principles of nematology] Osnovy nematodologii. Pod red. K.I. Skriabina.
Moskva, Izd-vo Akademii nauk SSSR. Vol. 4. [Dictyocaulidae, Heligmoso-
matidae, and Ollulanidae in animals] Diktiokaulidy, geligmozomatidy i
ollulanidy zhivotnykh. 1954. 323 p. (MIRA 8:4)

1. Akademiya nauk SSSR. Gel'mintologicheskaya laboratoriya.
(Nematoda)

SHIKHOBALOVA, N.P.; SKRYABIN, K.I., akademik, redakter; GUSHANSKAYA, L.Kh.,
redakter; MAKUNI, Ye.V., tekhnicheskii redakter.

[Helminthiases common to man and animals] Gel'mintozy, obshchie
cheloveku i zhiivotnym. Moskva, Izd-vo Akademii nauk SSSR, 1955.
87 p. (Helminthiases) (MLBA 9:5)

IL'INSKIY, P.I., professor

"How to protect children from helminthiasis". N.P. Shikhobalova.
Reviewed by P.I. IL'inskii. Pediatrics, no.6:81-82 N-D '55.

(MLRA 9:6)

(WORMS, PARASITIC AND INTESTINAL)

SHIKHOBALOVA, N.P.

Appearance of precipitins in blood of chicks infested with *Syngamus skrjabinomorpha* Ryjikov, 1948. Trudy Gel'm.lab. 8:259-266 '56.

(MLRA 9:8)

(Cestoda) (Parasites--Poultry) (Antigens and antibodies)